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REMARKS

The application has been carefully reviewed in light of the Office Action dated March 31, 2004. Claims 67, 87, 88, 90 and 92 have been amended. Claim 98 has been newly added. Claims 67-98 remain pending in this case.

The drawings stand objected to because the Office Action states that the drawing must show every feature of the invention. With respect to claims directed to signal transmission in an evacuated region, Applicant directs attention to the discussion of related art. See Page 1, lines 18-19. With respect to claims directed to signal transmission using a conductor, Applicants directs attention to the discussion regarding FIG. 7. See Page 9, lines 16-17. Applicant submits that the term "metal wiring" discussed at page 9, lines 16-17 also encompasses a coaxial relationship of "metal wiring" as recited in claim 77. With respect to claims directed to first and second transmission members, Applicant directs attention to the discussion regarding FIG. 8. See Page 10 lines 15-17. With respect to claims directed to a signal generator having first and second output, a first and second conductor, Applicant directs attention to the discussion regarding FIG. 8. See Page 11 lines 14-17. With respect to claims directed to signal receiver having first and second signal generators coupled to said first and second transmission members, Applicant directs attention to FIG. 11A. Also see Page 23 lines 25-26. With respect to claims directed to a signal receiver having first and second inputs, Applicant directs attention to the discussion regarding FIG. 8. See Page 11 lines 11-13. Accordingly, all claimed subject matter is present in the drawing and withdrawal of the objection is respectfully requested.

Claims 67-97 stand provisionally rejected under the judicially created doctrine of obviousness type double-patenting as being unpatentable over U.S. Patent No. 6,380,787. The rejection is respectfully traversed and reconsideration is respectfully

requested. Pursuant to the Examiner's request, a Terminal Disclaimer complying with 37 C.F.R. 1.321(c) is being filed concurrently with this Response. Accordingly, the rejection should be withdrawn.

Claims 75-77 and 87 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 75-77 and 87 are believed to be in compliance with § 112 based on the remarks stated above with respect to the drawing objections. Specifically, the electrical transmission medium is described at page 9, lines 16-17. The specification describes an electrical transmission medium in an evacuated region at page 1, lines 18-19. Applicant submits a coaxial relationship is implicitly described from the specification at page 9, lines 16-17. The specification discloses a signal receiver having first and second signal inputs coupled to the first and second transmission members respectively; first and second signal generators coupled to said first and second transmission members respectively at page 10, lines 14-18 and page 23, lines 25-26.

Claim 67, 71-77, 79-81, 88, 89, 92-94, 96 and 97 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Honoa et al. (U.S. Patent No. 5,376,842). Applicant respectfully traverses the rejection and requests reconsideration.

Claim 67 recites a signal transmission system comprising "a first transmission member having a first length, said first transmission member including a transmission medium" and "a second transmission member having a second length, said second transmission member including said transmission medium." Claim 67 further recites "a signal source having first and second signal outputs coupled to said first and second transmission members respectively" and "a termination circuit connected to at least one of said first transmission member and said second transmission member." In addition, claim 67 recites an impedance adjusting component coupled to said second

transmission member and adapted to affect, by said coupling thereto, a signal propagation factor of said second transmission member, whereby a relationship may be established between respective transmission times through said first and second transmission members of first and second signals received at said first and second transmission members from said respective first and second signal source outputs.

Claim 88 recites a signal transmission system comprising “a signal source having first and second signal outputs” and “a first transmission member coupled to said first output, said first transmission member having a first length, said first transmission member including a first transmission medium having a first characteristic impedance” and “a second transmission member coupled to said second output, said second transmission member having a second length, said second transmission member including a second transmission medium having a second characteristic impedance, whereby a relationship may be established between respective transmission times through said first and second transmission members of first and second signals received at said first and second transmission members from said respective first and second signal source outputs” and “a termination circuit connected to at least one of said first transmission member and said second transmission member for terminating at least one of said first transmission member and said second transmission member.”

Claim 92 recites a method of synchronizing first and second operations of respective first and second circuits comprising “receiving a first signal transition at said first circuit through a first transmission member, said first transmission member having a first signal propagation factor and a first geometric length, said first signal propagation factor related to a first characteristic impedance of said first transmission member” and “receiving a second signal transition at said second circuit through a second transmission member, said second transmission member having a second signal propagation factor and a second geometric length, said second signal propagation factor related to a second characteristic impedance of said second transition member, said second geometric length different from said first genetic length” and “terminating said first characteristic impedance of said first

transmission member and said second characteristic impedance of said second transmission member and receiving said first and second signal transitions at said first and second transmission members synchronously.”

Honoa discloses that “wiring impedances of the respective wirings 412, 413 and 414 from the input buffer 404 to the respective driver circuits 401, 402 and 403 are substantially equalized by suitably setting the capacitor 406 capacitance. Therefore, the clocks' attenuations and phase shifts in the wiring 412, 413 and 414 are equalized.” See Column 3, lines 15-23.

Honoa fails to teach or suggest all the limitations of claims 67, 88 and 92. Specifically, Honoa fails to teach or suggest the subject matter of claim 67 which includes in combination with the other recited structures “a termination circuit connected to at least one of said first transmission member and said second transmission member.” Honoa also fails to teach or suggest the subject matter of claim 88 which includes in combination with the other recited features “a termination circuit connected to at least one of said first transmission member and said second transmission member for terminating at least one of said first transmission member and said second transmission member.” Honoa also fails to teach or suggest a method of synchronizing operations of first and second circuits by among other things “terminating said first characteristic impedance of said first transmission member and said second characteristic impedance of said second transmission member” in combination with the other recited limitations. Accordingly, the rejection of claims 67, 88 and 92 should be withdrawn.

Claims 68-86 depend from claim 67, claim 89 depends from claim 88, claims 93-97 depend from claim 92 and are allowable along with claims 67, 88 and 92, respectively, for the reasons mentioned above and on their own merit.

Claims 68-70, 82, 91 and 95 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Honoa. Claims 78 and 87 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Applicants Admitted Prior Art (AAPA) in view of Honoa. Further, claims 83-86 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Honoa in view of Applicants Admitted Prior Art (AAPA). Applicants respectfully traverse the rejection and request reconsideration.

For the reasons mentioned above claims 67 and 92 are allowable over Honoa. Claims 68-70 and 82 depend from claim 67, claim 95 depends from claim 92 and are allowable along with claims 67 and 92, respectively, for the reasons mentioned above.

Claim 87 recites a signal transmission system comprising “a first transmission member having a first length, said first transmission member including a transmission medium, a second transmission member having a second length, said second transmission member including said transmission medium, a signal receiver having first and second signal inputs coupled to said first and second transmission members respectively, first and second signal sources coupled to said first and second transmission members respectively, a termination circuit connected to at least one of said first transmission member and said second transmission member for terminating at least one of said first transmission member and said second transmission member in a characteristic impedance of at least one of said first transmission member and said second transmission member and an impedance adjusting component coupled to said second transmission member and adapted to affect, by said coupling thereto, a signal propagation factor of said second transmission member, whereby a relationship may be established between respective transmission times through said first and second transmission members of first and second signals received at said first and inputs from said first and second signal sources respectively.”

Claim 90 recites a communication circuit comprising “a signal transmitter, first and second transmission medium coupled to said signal transmitter, first and second receiving circuits coupled to said first and second transmission media respectively, means

for equalizing an input impedance of said first receiving circuit and a first characteristic impedance of said first transmission medium, means for equalizing an input impedance of said second receiving circuit and a second characteristic impedance of said second transmission medium, means for terminating said first characteristic impedance of said first transmission medium and said second characteristic impedance of said second transmission medium, means for differentiating said first characteristic impedance from said second characteristic impedance.”

The Office Action fails to establish a *prima facie* case of obviousness of the subject matter of claims 68-70, 78, 82-87, 90, 91 and 95. Courts have generally recognized that a showing of a *prima facie* case of obviousness necessitates three requirements: (i) some suggestion or motivation, either in the references themselves or in the knowledge of a person of ordinary skill in the art, to modify the reference or combine the reference teachings; (ii) a reasonable expectation of success; and (iii) the prior art references must teach or suggest all claim limitations. See e.g., In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998); Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573 (Fed. Cir. 1996). The references used in the Office Action fail the first prong of obviousness in that one skilled in the art would not be motivated to combine the cited references in light of the totality of information disclosed in each reference.

In the present case, Honoa and the AAPA fail to teach or suggest the subject matter of claim 67 which includes in combination with the other recited structures “a termination circuit connected to at least one of said first transmission member and said second transmission member” or the subject matter of claim 87 which includes in combination with the other recited structures “a termination circuit connected to at least one of said first transmission member and said second transmission member for terminating at least one of said first transmission member and said second transmission

member in a characteristic impedance of at least one of said first transmission member and said second transmission member.” Honoa and the AAPA fail to teach or suggest the subject matter of claim 90 which includes in combination with the other recited features “means for terminating said first characteristic impedance of said first transmission medium and said second characteristic impedance of said second transmission medium.” Further, Honoa and the AAPA fail to teach or suggest the subject matter of claim 92 which includes in combination with the other recited limitations “terminating said first characteristic impedance of said first transmission member and said second characteristic impedance of said second transmission member.” Thus, the combination of Honoa and the AAPA fails to teach or suggest all the limitations of claims 67, 87, 90 and 92. Accordingly, the rejection of claims 87 and 90 should be withdrawn.

Claims 68-70, 78 and 82-86 depend from claim 67, claim 91 depends from claim 90, claim 95 depends from claim 92 and are allowable along with claims 67, 90 and 92 respectively, for the reasons mentioned above and on their own merit.

Newly added claim 98 depends from claim 67 and is allowable over Honoa and the AAPA for the reasons mentioned above with respect to claim 67 and on its own merit.

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In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

By 

Thomas J. D'Amico

Registration No.: 28,371

DICKSTEIN SHAPIRO MORIN &
OSHINSKY LLP

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

Attorney for Applicant

ASSIGNMENT AND AGREEMENT

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Please direct all correspondence regarding this application to the following:

Thomas J. D'Amico, Esq.
Dickstein Shapiro Morin & Oshinsky LLP
2101 L Street NW
Washington, DC 20037-1526
Telephone: (202) 828-2232
Fax: (202) 887-0689

MICRON TECHNOLOGY, INC.



Michael L. Lynch
Chief Patent Counsel
Registration No. 30,871

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